
A traumatic brain injury is an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgement; problem solving; sensory, perceptual, and motor abilities; psycho-social behavior; physical functioning; information processing; and speech. The term traumatic brain injury does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma. [34 Code of Federal Regulations 300.7(c)(12)]

The North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services includes traumatic head injury in the definition of developmental disability. A developmental disability is defined as a severe, chronic disability that:

- Is caused by mental or physical impairment or a combination of mental and physical impairments;
- Occurs before the person is 22 years of age, unless the disability is caused by a traumatic head injury and is sustained after the age of 22;
- Is likely to continue indefinitely;
- Results in difficulties in three or more areas of major life activities, such as self-care; language/communication; living independently; learning; mobility; and working;
- Reflects the person’s need for a combination of special interdisciplinary, or generic care, treatment, or other services which may be lifelong or for an extended time and are individually planned and coordinated.

Both of these definitions require that the TBI be acquired through an external force. Non-traumatic acquired brain injuries such as brain tumors, vascular/circulatory disorders, and degenerative diseases are not considered TBI but individuals may benefit from the same type of screening, assessment and referral guidelines outlined.

Incidence of TBI

Brain injury is one of the leading causes of death and disability among young people in North Carolina. According to the Center for Disease Control, each year in North Carolina, 36,883 people are seen in emergency departments for traumatic brain injuries, 6,972 are hospitalized because of traumatic brain injury, and 1,816 people die each year because of traumatic brain injury. Additionally, 2,468 individuals acquire a life long disability due to a traumatic brain injury. (CDC 1995-2000).
Although traumatic brain injuries can occur at any age, adolescents and young adults have the highest number of deaths and hospitalizations due to TBI. The primary causes of TBI for these age groups are motor vehicle crashes and firearms in homicides and suicides. (2001 TBI mortality data from the NC State Center for Health Statistics) Firearm use is the leading cause of death related to TBI. (CDC 1999) The primary cause for TBI in older adults is falls.

Screening and Referral Procedure Description

There are many differences in presenting factors for individuals with traumatic brain injuries and those with developmental disabilities. When screening and assisting TBI survivors with locating community-based resources, it is essential that the direct support professional have an understanding of TBI, the differences from other disability groups, and knowledge of compensatory strategies required to follow through with information given. Following is a recommended best practice procedure for the screening and referral process when working with individuals with TBI. Because direct support professional’s knowledge of traumatic brain injury, the residual effects, and recommended compensatory strategies are essential to the success in the screening and referral process, this has been included in this best practice procedure. The Missouri Department of Health and Senior Services’ Direct Care Work Competency List was modified for use in North Carolina.

TBI Screening and Referral Procedures

Staff Knowledge of TBI

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| Knowledge of state and federal legislation affecting individuals with TBI. | 1. Knowledge of TBI Act, Individuals with Disabilities Education Act, the Rehabilitation Act.  
2. Knowledge of the NC Mental Health, Developmental Disabilities, & Substance Abuse, the NC Developmental Disabilities definition of TBI and service availability. |
| Knowledge of key characteristics of TBI               | 1. Knowledge of traumatic brain injury definition according to NC state statue.        
2. Knowledge of the differences between acquired brain injury and traumatic brain injury.  
3. Identify the major causes of TBI.                   
4. Identify common difficulties following a TBI, which may affect accurate screening and referral processes.  
5. Identify potential physical effects following a TBI.  
6. Identify potential cognitive effects following a TBI. |
|                                                        | 7. Identify potential psychological/behavioral/social effects following a TBI.         
8. Identify potential communication effects following a TBI.  
9. Identify potential effects of the TBI on family dynamics.  
10. Knowledge of crucial differences between the         |
Knowledge of unique components of service delivery for individuals with TBI.

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| Establish a positive, professional relationship with the TBI consumer.               | 1. Use language that emphasizes the individual first and the disability second.  
2. Establish effective communication strategies.  
3. Determine culturally sensitive issues.  
4. **If consumer seems unsure of his/her presenting diagnosis, ask consumer if he/she has sustained a concussion or brain injury at any time during their life.**  
5. Devise a plan to learn about the consumer, i.e. interviewing individual at their home, interviewing family members or spouse.  
6. Describe to the consumer the level of confidentiality that the professional relationship provides.  
7. Request permission to gain information from the consumer’s family or significant other to obtain further information about the consumer’s abilities and needs.  
8. Discuss with consumer the importance of his/her involvement in the decision-making for services. |
| Identify the consumer’s internal and external supports                             | 1. Identify the personal resources that will impact the individual’s ability to access resources.  
2. Determine the relationship between the consumer and his/her family members  
3. Determine the relationship between the consumer and friends, co-workers, significant others.  
4. Identify community resources that are currently used by the consumer |
5. Identify community resources that are available to the consumer.
6. Determine government benefits individual is eligible for and is currently receiving as well as financial resources.
7. Identify the consumer’s goals (or the consumer’s family’s goals).

| Determine consumer’s physical, cognitive, behavioral, and psychosocial abilities. | 1. Request medical charts from both acute care hospital and rehabilitation hospital, including neurospych testing if available.
2. Identify any current medical health concerns and prescribed treatments.
3. Assess consumer’s capacity for mobility in the home and community and related assistive devices.
4. Assess the consumer’s memory, judgement, organizational skills, emotionality sensitive areas, and tolerance for stress.
5. Identify compensatory skills currently using and effectiveness of these strategies.
6. Assess consumer’s ability to accurately perceive his/her current abilities. |

### Assessment of Needs

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| Safety concerns and situations that require urgent actions. | 1. Know the signs of seizures and employ proper actions.
2. Identify potentially dangerous situations, i.e. forgetting to turn the stove off, forgetting to eat, etc.
3. Identify signs of abuse or neglect.
4. Assess the potential for the exploitation of the individual by others.
5. Identify unsafe environmental conditions (weapon storage, stairs, drug paraphernalia)
6. Assess consumer’s awareness of what to do in an emergency situation (cut self badly, fire, etc.)
7. Assess dysfunctional activities( possible substance abuse, poor selection of friends, exploitation by family, friends or others).
8. Assess ability to take medication as prescribed.
9. Be aware of suicidal tendencies. |
| Self-care concerns. | 1. Assess ability to select well-balanced items for meals.
2. Assess ability to prepare meals.
3. Assess time awareness and ability to schedule meals.
4. Assess ability to perform personal hygiene activities on a routine basis.
5. Assess ability to select attire appropriate to season, activity |
and weather conditions.
6. Assess ability to schedule doctors, dentist, etc. appointments.
7. Determine ability to seek and obtain medication refills when necessary.
8. Assess ability to initiate and follow through with a daily schedule and use of a planner.

| Transportation concerns. | 1. Assess orientation to home surroundings as well as community surroundings.
2. Assess ability to observe signage in the community.
3. Identify ability to transport oneself in the community, such as ability to drive, holds a current drivers license, use of public transportation to familiar destinations as well as unfamiliar.
4. Be aware of ability to safely navigate in their community, such as awareness of traffic patterns, crossing streets safely, orientation to area. |

| Social interaction concerns. | 1. Assess ability to initiate and carry a conversation.
2. Determine ability to maintain topics during conversation.
3. Be aware of body language difficulties, such as awareness of personal space issues, ability to read others body language, ability to portray appropriate body language.
4. Assess use of manners.
5. Assess ability to establish and maintain interpersonal relationships with friends, co-workers, and/or relatives. |

| Vocational/ Avocational concerns. | 1. Assess awareness of current functional abilities and difficulties.
2. Assess ability to seek vocational assistance through community-based resources such as Vocational Rehabilitation, work adjustment programs, etc.
3. Assess ability to express work-related interests, skills.
4. Identify what a typical day looks like for the consumer.
5. Determine ability to manage unstructured time.
6. Identify leisure interests and ability to pursue interests. |

| Management of home concerns. | 1. Become knowledgeable about ability to initiate and perform housekeeping chores such as dusting, vacuuming, on a routine basis.
2. Determine ability to perform laundry tasks successfully and on a routine basis.
3. Determine ability to safely identify and store poisonous household supplies.
4. Assess ability to be left unsupervised for periods of time. |

| Financial concerns. | 1. Assess ability to manage personal finances such as paying bills, shopping, budgeting.
2. Determine ability to budget money from pay period to pay |
3. Identify bills consumer is responsible for and method to pay them.
4. Determine if impulsiveness is an issue when spending money.
5. Determine consumer’s ability to track money spent.
References

Missouri Department of Health and Senior Services Direct Care Worker Competency List, U.S. Department of Health and Human Services, Health Resources and Service Administration, Maternal and Child Health Bureau.